Claims

1. Method for testing an appliance (1) having a smart card reader (4) for operation with a smart card, **comprising the steps**

using a test adapter (2) with contacts (C1 - C8) as an interface, which is inserted into the smart card reader (4) for testing of the appliance (1) and

using a contact (C6) of the smart card reader (4) for testing of the appliance (1), which is not used by the appliance (1) during operation with a smart card.

2. Method according to claim 1, **characterized in that** one of the smart card contacts (C6) used for testing of the appliance (1) is the smart card contact for the programming voltage VPP.

3. Method according to claim 2, **characterized in that** the test adapter (2) is coupled via a cable (10) to a computer (3), and that as a further smart card contact (C7) for testing of the appliance (1) a contact for data in/out (C7) is used, for operation of the test adapter (2) as a serial interface in connection with the computer (3).

4. Method according to one of the preceding claims, **characterized in that** the appliance (1) is a digital set-top box or a digital satellite receiver and the method for testing of the appliance is a Factory Functional Test or an aftersales diagnostics test.

5. Test adapter for a method according to one of the preceding claims, **characterized in that** the test adapter (2) comprises contacts (C1 - C8), which are arranged according to a smart card standard on a part (6) of the test adapter (2), and which part (6) is

suitable for inserting into the appliance (1) for contacting the contacts (C1 - C8) of the smart card reader (4).

6. Test adapter according to claim 5, **characterized in that** the part (6) with the contacts (C1 - C8) for inserting into the appliance (1) has a thickness in accordance with a smart card to be used with the appliance (1), and that the test adapter (2) comprises further a second part (7) with a serial adapter interface (5), especially a EIA-RS232 to ISO 7816-3 interface, for a connection to a computer (3).

7. Appliance with a smart card reader (4) for an operation with a smart card, **characterized in that** one contact (C6) of the smart card reader (4), which is not used by the appliance (1) during normal operation with a smart card, is usable for testing of the appliance (1).

8. Appliance according to claim 7, **characterized in that** one of the smart card contacts (C6) used for testing of the appliance (1) is the smart card contact for the programming voltage VPP.

9. Appliance according to claim 8, **characterized in that** the contacts used for testing of the appliance (1) are a supply voltage input (C1), the programming voltage VPP (C6), a data In/Out contact (C7) and ground (C8).

10. Appliance according to claim 9, **characterized in that** the contact (C7) for data In/Out is coupled to a buffer circuit (IC1), and after amplification by the buffer circuit (IC1) is coupled to a DIN contact (DIN) as well as to a receive contact of a RS232 internal interface.

11. Appliance according to one of the preceding claims 7 to 10, **characterized in that** the appliance (1), after insertion of a smart card (S1), provides a smart card activation with a reset (S2), and in a further step, when the answer to the reset is negative (S3), the appliance (1) provides a test mode initialisation (S5) for a test with a computer (3) via a test adapter (2) to be inserted into the smart card reader (4).

12. Appliance according to one of the preceding claims 7 to 11, **characterized in that** the appliance (1) is a digital set-top box or a digital satellite receiver and the method for testing of the appliance is a Factory Functional Test or an aftersales diagnostics test.